THE ORIGIN OF HUMAN FAMILY

-A Primatological Approach-*

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*:.....This paper was published originally in Japanese in the Japanese Journal of Ethnology 25:119-138, 1961

More than ten years ago I wrote a book entitled Prehuman Societies (Iwanami-shinsho), and in it tried to offer a theory of evolution from subhuman primate society to human society. The origin of human family was naturally treated as one of the important subjects in it.

After many years of efforts to elaborate it upon accumulated data, this theory was entirely revised and extended in the recently published book, Gorilla. Both books being written for the general reader, my views are not yet explained in detail to get the appraisal of professional scientists. So, I deicded to write this paper.

The opinions of previous writers on the origin of human family are mostly nothing but to suppose the primitive conditions of human family on the human level. They have not paid much attention to the fact that there once existed subhuman primate family before the appearance of human family on earth, or that the former evolved into the latter. Subhuman primate in this context means a kind of ape just before the ancestor of man evolved into the human level. I stated in the Prehuman Societies as follows:

"--- We must make it clear first of all what social level man could possibly reach in the end of his evolution, though still an animal, or a kind of ape. In other words, that was the last stage of evolution attained by some

subhuman primates immediately before reaching the human level. Even man, when he was on the monkey level in the course of his evolution, must have a monkey-like mode of life. Here we must necessarily confine our consideration to the subhuman level, especially to this last level of evolution. Otherwise, our problem would become unnecessarily complicated and not easily solved."[1]

Non-existence of such subhuman primates as mentioned above in the world today compels us to survey the societies of existing monkeys and apes instead and to discover the main trend of evolution of their societies after comparing them carefully, and then to extrapolate it to the limit of evolution attained by subhuman primates just before reaching the human level. This is an inevitable methodology what we call a primatological approach.

We need an anthropological approach as well to accomplish our study. When these two methods are used, it will be possible for the first time to show in what stage subhuman primates evolved into the human being. To treat the origin of human family we must draw from cultural anthropology the minimum conditions in which, how primitive, a social group of apes should be admitted to call a human family. They are (1) incest taboo, (2) exogamy, (3) community, and (4) the economic division of labor between male and female consorts. When the

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1) Kinji Imanishi: p. 155, 1951

above four conditions are satisfied, a group of apes is to be admitted to call a human family, how seemingly they look like apes. On the other hand, if there is one condition left unsatisfied however it may look like a human family consisting of a male, a female, and their young, it is still on a subhuman level of ape, far from a human family. We must avoid calling it undiscriminatively a family. As a biological terminology a family may be limitted to denote a group of one female and her nursing young, but it is more desirable to reserve the term for the phenomena only on the human level.

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More explanations from the standpoint of cultural anthropology will be required for the four conditions as the criteria of human family.

Incest taboo and exogamy are both social institutions which regulate the activities of human family, and more precisely, the behavior of its individual members. So far as they are social institutions, there must be presupposed an existence of a society which includes all families belonging to it and where they interact with one another. Such a social assemblage in its primitive state must be a local one. If it is possible to call it community, then incest taboo and exogamy, together with community, will have inter-relations and regulation. It is, therefore, a matter of dispute whether we can decide which is the earliest of the three in its origin; incest taboo,

exogamy, or community. We must recognized here as well that, in the society where incest taboo and exogamy are accepted as social institutions family itself has already been admitted to be a kind of institution.

Seligman says that the maintenance of the family as an institution required incest taboo, from which exogamy derived.(2) Fortune(3) and White(4) think that exogamy was indispensable to the cooperation among families, which resulted in incest taboo. Both opinions seem to be one-sided views. Functionalism demand us to say that the existence and maintenance of human society depends much on consistency in inter-institutional relations.

As Count(5) and Slater (6) have already remarked, explanations by means of functionalism are after all nothing but 'a post fact logic.' It is, therefore, doubtful whether the present-

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2) Seligman: pp. 307 & 315, 1950
3) Fortune: p. 621, 1932
4) White: p. 423, 1948
5) Count says, "Any explanations of incest which start from the present-day rationalizations of primitives as to why they disfavor or condemn it are to be discounted at face value. Moreover, explanations in which anthropologists attempt to use the advantages that have accrued to society from incest tabu as the reason for their coming into existence or for their persistence, display a post facto logic and also are to be discounted." (p. 1080, 1958)

6) Slater: 1045 ff, 1959
Dole, Gertrude E. has the same opinion, though it is not published yet: A Preliminary Consideration of the Origin of Incest Prohibitions, Based on the Comparative Study of Human and Subhuman Primate Societies. MS.

day function can explain fully its origin in the past. How elaborately it may be explained, the explanation will stop short of a proof, -- for example, the natural selection famous for Darwin's theory of evolution is in this sense no more than an elaborate explanation, the truth of which is quite another matter. Therefore Malinowski(7) is worthy of praise who has abandoned, from his standpoint of functionalism, every attempt to explain origins.

Though it is natural as a phenomenon in human society that incest taboo and exogamy are social institutions, White declared that the use of language, namely that of symbol in a wider sense, is an indispensable requisite to the establishment of these institutions. He seems only to elude rather than explain the origins of incest taboo and of exogamy. We agree that the use of language may be instrumental in institutionalizing them, but it would seem more reasonable to consider that the existence of incest taboo and of exogamy in the pre-institutional state before the use of verbal communication enabled themselves to develop into social institutions with the use of language. As evolution means a kind of elaboration, so we must always pay our attention to the state before elaboration

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7) Malinowski: Special Foreward, xxii-xxiii, 1929
Malinowski, unlike Seligman and White, considers that incest taboo and exogamy are both complementary. (Goody: p. 287, 1956)
Murdock's opinion is also healthy. (Murdock: pp. 295-6, 1949)
Parsons understands from the view-point of the socialization of infants that incest taboo has a connective function between a society including families and an individual family included in the society, and he distinguishes between the function of incest taboo and its origin without referring to the origin.
(Parsons: p. 115, 1954)

began in order to trace back the process of evolution.

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It has been suggested that the human family is not to be admitted if there are no incest taboo and exogamy. The pre-institutional state of them, therefore, corresponds to that of the subhuman primate family. I want to use the term 'subhuman primate family' here, so far as our study is concerned with cultural anthropology, because among others White thinks that the family had been formed before the existence of culture.(8)

In what state was the subhuman primate family? Of course, there existed no incest taboo before the existence of culture. What happened then without the taboo? Incest may have been committed in consequence. It must be assumed that nonprohibition of incest may have caused indiscriminate sexual relations between parents and their children, and between brothers and sisters, that is, a kind of promiscuity. This may be called a subhuman primate state, but we can not see within it what is called the subhuman primate family if such a promiscuity prevails. White says that the maintenance of the subhuman primate family without the taboo is ascribed to the fact that an adult male prevented his young males from nearing their mother and young females.(9)

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8) Clearly wrong is White's opinion that the society of monkeys and apes, of whatever species they may be, consists of families. (p. 166, 1959) It is related to his assumption, though wrong as well, that any species of monkey or ape has no breeding season. (Ibid. p. 64) As to the breeding season, see Imanishi's paper. (pp. 394-5, 1960)

9) White: Ibid. p. 91, 1959

We must admit that he has been influenced by Freud to some extent in this point. Freud gave much attention to the relation between mother and son, and declared that the so-called Oedipus complex is the unresolved desire of a son for sexual gratification through his mother.(Note 1) Malinowski remarks, however, that spontanious sexual relation between mother and son in the materilineal society in Trobrinand is not so important(10) and that what seems most important there is rather incest between brothers and sisters.(11) Surely incest between brothers and sisters must be regarded as more important in connection with exogamy as an institution.(12)

It would not be an exaggeration to say that explanations of the subhuman primate family from the view-point of cultural anthropology have not shown any improvement upon the theory of Freud. Strangely enough, it has not been suggested by any cultural anthropolorist that before incest taboo was institutionalized, there must have been a stage where pre-institutional prohibition or avoidance of it was already a social practice.

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10) Malinowski: p. 441, 1927
That incest between son and mother is the greatest sin is not a deduction from the fact that, but for incest taboo, it would be most easily committed. We should consider here that parental homicide is rarely committed, but the greatest sin, if committed. (Imanishi)

11) Malinowski: p. 96, 1927 & p. 437, 1929

12) Seligman points out this matter as well. Cf. Goody: p. 301, 1956

Slater in his paper in 1959 pointed out such a blind-point of anthropology. He gave us a table showing the ages of a mother and her six children born every three or four years to prove how little is the possibility of incest between family members -- between parents and children, or between brothers and sisters. He declares upon this hypothetical age-table that members of the subhuman primate family without incest taboo may have committed incest if they had had any chance to do so, but as a matter of fact, their parents would have been dead before their children grew up, or it would hardly be possible for all the children to come to maturity during a limited period, so that they must have been compelled to find their spouses outside the family. He suggests, moreover, eventually transformed into incest taboo or exogamy and then further into its present complexity as an institution in human society. The reason that we think much of this theory is that he pointed out the proto-type of exomany, not to say that of incest taboo. Exogamy suggests the institution of marrying outside the clan. We want to use the word "mating out" as Slater does for the act of seeking for a spouse outside a family. "Marry out" is not an appropriate word to the subhuman primate family, because marriage was not admitted yet as an institution.

We cannot agree to his paper in that, though disparity in age among the members of the subhuman primate family is shown to be regular in his hypothetical age-table, it may be rather irregular in reality, so that there seems to have been more

possible chances to commit incest than he supposes, especially between brothers and sisters, and that, though he takes the nuclear family consisting of father, mother, and children as a model of the subhuman primate family, there is no reason to assume that the subhuman primate family was monogynous.(13) If it had been polygynous, sexual relations may have arisen between a son and a young mother-in-law, and much more between brothers and sisters of about the same age who had been born of different mothers. In this case, Slater's assertion of "mating out" may lose its power to a great extent.

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Now, we will take up our problems not from anthropological, but from primatological point of view. To begin with, we want to discuss the society of Japanese monkeys, because it is best known to us. What is most characteristic of the society of Japanese monkeys is that the unit of the society is an oikia(14) with its own territory. Besides of it, there are many male monkeys living alone separately, not belonging to any oikiae.

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13) Similarly there is not any reason to assume that the primordial human family into which the subhuman primate family developed was monogynous as White thinks (White: pp. 73-5, 1959). Moreover, he remarks that the invention and use of language enabled individual males to communicate and cooperate with one another to beat stronger males who had exclusively possessed many females and that in redistributing females they could eventually form a monogynous family. This is no more than a repetition of Freud's theory that brothers cooperate with each other to kill their father (Freud: p. 141 ff, 1950). Lévi-Strauss: p. 226, 1956), and Levy ventures to say that too much attention to monogynous family is due to an European prejudice (Levy: p. 280, 1955).

14) Imanishi: p. 397, 1960

An oikia may be divided into two parts -- the central part and the peripheral part. The former is formed by some male leaders and all females with their young, and the latter by all males excluding the leaders. We must here notice that all the young living in the central part with their mothers are not necessarily the leader's children, because during a breeding season some females often have sexual relations with young males in the peripheral part.

These facts tell us that any male infant is forced to withdraw to the peripheral part some day. In fact, male infants at the age of two are sometimes observed to come to play in the peripheral part in the day-time and return to their mothers at night. When they become three years old, they come to settle in the peripheral part. On the contrary, female infants continue to live in the central part for life.

After withdrawal to the peripheral part, male infants come to maturity there, leading a peripheral life. But sometimes a young male ventures to leave his oikia to become a solitary monkey. At Koshima, an island in Miyazaki Prefecture, Kyushu, solitary monkeys usually return to their native oikia after several years of withdrawal from the oikia, because they cannot go anywhere except this small island. This is, of course, a particular case. Generally, once having left an oikia, a solitary monkey seldom returns to it. It is almost impossible for us to know where he has gone, but in some cases some solitary males, though very few, are known to be accepted by other oikiae. It is still a matter of dispute why some young males settle in

the peripheral part, but why other try to withdraw from the oikia. Young males born at Koshima, or Arashiyama*, or Minoo have a habit of leaving their oikiae. Those at Takasakiyama were once inclined to settle in the peripheral part. In such a large oikia as seen at Takasakiyama where many male monkeys are living in the peripheral part, young males may not necessarily withdraw from the oikia, while in a small oikia where there is not fixed group of male monkeys in the peripheral part, young males may feel it uneasy to settle there for some unknown reasons and finally come to leave the oikia.

Withdrawal to the peripheral part or from the oikia is very important so far as the problem of incest is concerned. A male Japanese monkey comes to sexual maturity at the age of from four to five. When he leaves his mother for the peripheral part, he is still immature. We do not think it probable for him to have committed incest by that time. We shall assume that he dicides to withdraw from the oikia after having led a peripheral life for some years, that is, after he has fully grown up. If his withdrawal from the oikia is carried out without having sexual experience, it will not be necessary to take up the matter of incest, but as a matter of fact, a young male in the peripheral part, as we have mentioned above, sometimes has sexual relations with females during the breeding season. It may be admitted, therefore, that before his withdrawal from

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* "-yama" means "mount" in Japanese.

the oikia he has usually experienced sexual intercourse with some females.

Is there any possibility that he has sexual intercourse with his mother? According to Tokuda's observation on the mixed colony of rhesus monkeys and crab-eating monkeys at Kyoto zoo,[15] no sexual intercourse was observed between a female named Himiko and her son named Bandal during her estrous period. Though this is based on a continuous observation during one breeding season, it suggests much about the matter of incest. Monkeys are said to keep their mothers in the memory even when they have grown up. The mother have raised and protected them since the day of their birth, and they have always followed their mothers since then. For these days a mother is always higher in social rank than her son. Her advantageous position in society will be kept so long as he keeps her in the memory.

Nevertheless, he may have a desire for sexual gratification through her at times. A posture of a sexual intercourse taken by a male monkey is, as Tokuda has already suggested, much the same as taken by a superior male to show his dominance over an inferior one when two males encounter. How should it be possible and necessary for Bandal to mount on her mother Himiko, judging from the fact that he has ever subjected himself to her dominancy since the day of his birth[16] and that there are many females to mate with around him?

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15) Tokuda: pp. 257-260, 1957

16) Malinowski gives the following suggestive accounts about it: "Mating with her would have to be, as all mating must be, preceded by courtship and a type of behavior completely incompatible with submission, independence and reverence." (p. 250, 1927)

As we have already stated, Koshima is so small an island that difficulty of withdrawal from the oikia compels a male to come back to it some day. This is the first oikia that we have succeeded in feeding, and its pedigree is best known to us because of its small population. Of course, we can identify whose son one is, or whose mother another is. During a breeding season every year, some members of our staff stay in the island to observe consort relationships in the oikia, but not a single case of incest between mother and son has been reported up to now.

If it is true that a male monkey does not commit incest with his mother while having a chance to do so, Freudian theory may lose its ground. If man has a natural inclination to long for incest, how much more should monkeys have! From our present knowledge, it is safe to say that the fact is not so. Again, we must emphasize that Bandal did not commit incest with his mother Himiko, though there was no male stronger than he in the colony to prevent him from doing so.

Non-commitment of incest between mother and son and withdrawal of young males to the peripheral part or from the oikia may be ascribed to different motives. It may be said that withdrawal from the oikia inevitably means "mating out," whatever motive may have caused it. Even if there is no female except his mother in the oikia to satisfy his sexual desire with, there is a possibility that he will mate out and avoid incest when he intends withdrawing from the oikia. We have

mentioned that monkeys such as Japanese monkeys or rhesus monkeys, though distant from human beings in evolutionary level, have the forerunners of incest taboo and exogamy which have been institutionalized in human society. What we have mentioned seems more reasonable than Slater's opinion, for he has taken up only a matter of mating out, disregarding incest.

What concerns us here is only incest between mother and son. Japanese monkeys have no fixed consort relationships, and female monkeys have sexual relations with many different males during a breeding season, so that we have no means of knwoing who is an infant's father. Incest between father and daughter does not come to our problem. What about incest between brothers and sisters? Born of the same mother, they may have close and intimate relations with one another. Although it seems that they have no reason to refrain from committing incest, further observations should be desired about this matter.

It does not matter whether incest between mother and son may be included in our observations or not, for even in human society where incest taboo has been institutionalized, it is sometimes violated;[17] much more possibility of incest there may be in its pre-institutional state. Such cases of incest may be treated as valuable data to show a transitional stage from instinctive to cultural behavior.

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17) Malinowski gives us some examples of incest between brother and sister, or between father and daughter (pp. 99-100, 1927).

What causes a male monkey to withdraw to the peripheral part, or from the oikia? This is a long concerned, though still unsoved, problem. Importance of this problem lies in the fact that he is a male monkey in an oikia where males and females live together. In case of deer which divide themsleves into two sections according to sexes, young males are forced to leave their mothers and join a male section. Kawamura who has observed deer at Nara Park says as follows:

> "We can only say that a young male has no fixed period of departure, because he leaves his mother as naturally as if a ripe fruit dropped from a tree, when he reaches maturity."(18)

When there is no other male deer stronger than or as strong as he in his mother's oikia, why is he not willing to stay for life in the oikia? It necessarily infers from his voluntary departure that he may leave his mother to need males, but not females.

An oikia of monkeys consists of males and females, though most of the former occupies the peripheral part and the latter the central. In other words, they also separate themselves into two sections. It is supposed that a young male monkey in need of males, like a male deer, immigrates into the peripheral part. Though there are several dominant male leaders in the central part, they do not pay any attention to the infant's behavior. We may think it natural by analogy from the case of

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18) Kawamura: p. 119, 1957

deer. Male leaders have no reason to feel jealous of their male infant still immature at the period of his withdrawal to the peripheral part and drive him out of the central part.

Compared with male deer whose departure from their mothers means withdrawal from his native oikia, a male monkey does not try to leave his native oikia until after his immigration into the peripheral part.(19) It seems to be related with the rate of growth different between the monkey and the deer, and with a reason peculiar to the monkey that at the period of his withdrawal to the peripheral part he still in infancy can not lead a solitary and independent life until he acquires a good knowledge of the way of life from other males while staying at the peripheral part.

Now we must take up the withdrawal from the oikia of a mature male monkey. As already mentioned, all the monkeys do not always leave their oikiae. It may be inferred from known facts that those of high rank in the peripheral part tend to withdraw from the oikia.(20) From Freudian theory it may be concluded that those males are forced to leave the oikia by leaders which monopolize all females. To our great regret,

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19) We are informed by Junichiro Itani that some monkeys leave their oikia soon after their withdrawal to the peripehral part.
20) The age of monkeys who try to withdraw from the oikia is different in different oikiae. It was observed by Itani that at Takasakiyama monkeys try to leave the oikia at the age of about ten. It is said that monkeys at Koshima mostly leave the oikia at the age of five or six. According to Masao Kawai's observation on the oikia at Inuyama which belongs to the Japan monkey Centre, monkeys at the age of five or six tend to disappeare from the oikia.

this easy explanation is still widely accepted without reconsidering it. The truth is that leaders do not always monopolize all the females, and that they do not try to expel some peripheral males from the oikia with antagonistic feeling. Not a single fact about this has ever been observed.

Withdrawal from the oikia, we suppose, does not fundamentally result from sexual dissatisfaction. Withdrawal of peripheral males may be attributed to the limit of social status they could occupy. They must content themselves with low status and easy work manageable by younger monkeys, so long as their leaders or subleaders are alive, though in fact they are eager to do many things freely including sexual behavior like the leaders or subleaders do. Why do they not venture to dethrone their leaders by force? This is also related to the question, as we have already stated, why Bandal does not commit incest with Himiko. In short, younger males have been taught since their infancy that they should not be rebels against leaders or against social order in the oikia. Therefore, they cannot but find their ways in another oikia if they want to behave as freely as leaders do.

What we have mentioned is one of the explanations ever presented about withdrawal from the oikia, though it is hardly known where male monkeys have gone after their withdrawal from the oikia. From the fact that many solitary males are seen at various places, it necessarily follows that it is almost impossible, or in some cases, full of difficulties, for them to succeed in becoming leaders in another oikia.

An event happened which seemed to give some evidence to the above-mentioned explanation about withdrawal from the oikia.

It was a split of the oikia at Takasakiyama observed in 1959, which was reported in detail by the observer.(21) What most concerns us here is that three peripheral males named Hosi, Siro, and Kuri -- each at the age of twelve or thirteen -- did lead in splitting up. Though there were once such able males as these in the peripheral part, all of them eventually left the oikia one after another. These three peripheral males had already come to maturity enough to be able to leave the oikia. If they had reached maturity a few years before, they would have left it. At that time when the division of the oikia occurred, its population was surprisingly increasing. Every year about eighty babies were born. Total population amounted to over six hundred. Consequently a considerable number of females came to be found in the peripheral part, for the central part had no room to receive all the females in the group. These three males, therefore, came into contact with females in the peripheral part and finally succeeded in integrating them to form a new oikia. Moreover, other peripheral males voluntarily left the native oikia to join this new oikia. Thus, the division of the oikia went on gradually and steadily, till a new oikia was completely formed with the three males as its leaders. Though the three males' activities cannot be regarded as withdrawal from the oikia in the ordinary sense of the term, it is nevertheless an abnormal type of withdrawal from the

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21) Sugiyama: p. 109, 1960

group. We think that the above fact gives us a hint to solve the problem of withdrawal from the oikia.

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We have hitherto attempted to find a forerunner of incest taboo or of exogamy which are two of the four characteristics of human family, and have pointed out that commitment of incest between mother and son is difficult in an oikia of monkeys, and that, though not directly connected with incest or exogamy, withdrawal from the oikia of young males causes their 'mating out.' Now we will take up gibbons to see how these forerunners in the society of monkeys are revealed in that of anthropoid apes which have evolved further toward mankind.

According to Carpenter's observation, an oikia of gibbons consists of one male, one female, and usually two infants.(22) It should be refuted as a sort of anthropomorphism to describe an oikia of gibbons as a family because of its composition. Carpenter, however, makes this mistake. So do Yoshiaki Ito(23) and Junichiro Itani(24) who use the term 'family' for the oikia of gibbons.

We can infer from the composition of the oikia of gibbons that young males must withdraw from the oikia before they have fully grown up. The fact that solitary male gibbons are sometimes to be found supports this assumption. But what troubles

22) Carpenter: 1940
23) Yoshiaki Ito: p. 262, 1959
24) Junichiro Itani: p. 45, 1960

us is that judging from this composition females must withdraw from the oikia as well. Carpenter describes that he has observed solitary females.(25) It has never been observed that there are solitary females among Japanese monkeys. Why do female gibbons try to withdraw from the oikia?

Carpenter's opinion is simple and clear that the consort relationship keeps its balance in so far as their oikia consists of one male and one female, and that a young male's or a young female's and the latter by her mother's, jealousy and rivalry. Even Carpenter seems to be influenced to some extent by Freudian Theory. Japanese monkeys and rhesus monkeys(26) have a breeding season, but gibbons have not. In other words, the latter are capable of sexual intercourse at any season through the year, which shows that they always take sexual interest in females. Some may assert that Freudian interpretation holds good under these conditions. Of course, we frankly admit that the problem of sex becomes relatively more important for the life of gibbons.

The formation of a small oikia may be originally connected with the problem of sex. If Japanese monkeys or rhesus monkeys do not have a fixed breeding season and have possibility to reproduce at any season through the year, they may form small groups based upon their consort relationships in their oikiae. What Haddow means by 'family party'(27) in the oikia of red-

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25) Carpenter: p. 124, 1940

tail monkeys seems likely to be this kind of small group. When these small groups come to have their respective territories, each of them will become an independent oikia like that of gibbons.

If the fixed breeding season of Japanese monkeys or rhesus monkeys disappears, there remains still a cycle of sexual behavior based on menstruation and ovulation -- independently of the season. At the later stage of evolution of sexual behavior, however, females are able to have sexual excitement regardless of this cycle in accordance with males. This is a rough outline of the evolution of sexual activity of primates.

Gibbons are said to have evolved to the extent that their sexual excitement is not controlled by this physiological cycle. If their sexual balance is kept between one male and one female, will it not be inconvenient to have either more than one adult male or more than one adult female in an oikia? Of course, sexual potency is different in different individuals. Some may not feel gratified through one male or one female. In this case, the easy possible way to satisfy themselves is to commit

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26) At that time when I was writing the paper for the Current Anthropology, no exact data existed for the breeding season of rhesus monkeys (Imanishi: p. 395, 1960). Since then, it was found after two years's observation on rhesus monkeys at Cayo Santiago by Altmann that their breeding season begins at the end of September and continues for about five months (Stuart A. Altmann: The Social Behavior of Anthropoid Primates; An Analysis of Some Recent Concepts. M.S.).

27) Haddow: p. 353, 1952

incest with their mature daughter or their mature son. It is possible as well that, when either of spouses dies, a male or a female left will choose his daughter or her son as a new spouse.(28)

Although possible theoretically, judging from the social behavior of Japanese monkeys we may suppose that incest between mother and son is far less possible than between father and daughter in the society of gibbons. It is dubious whether we may treat withdrawal of female gibbons from the oikia as the same problem as that of male ones. We have observed that a sort of matrilineal attachment exists between mother and daughter both in deer's society and in monkey's society. There is no way to prevent young males from withdrawing from the oikia, because they do so of their own free will. On the contrary, young females live and act following their mothers' behaviors in the oikia, so far as circumstances permit. The mothers admit them to do so. They never try to expel their daughters out of the oikia as their rivals. There must be a different motive about withdrawal of female gibbons from the oikia. In our opinion, it may be that some male gibbon which has already left his oikia lure a young female from her native oikia in need of his spouse.

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28) Carpenter thinks it possible (Carpenter: p. 127, 1940). He thinks that whether between mother and son, or between father and daughter, a union between a male and a female together with their children may be regarded as a family. We have had an opinion that, in so far as incest between mother and son is committed, it is impossible to call this oikia family. (Imanishi: p. 397, 1960) In this paper we want to dilate upon our opinion again.

Carpenter seems to be content with the familiar Freudian explanation, though his opinion is not based upon his direct observation, that young males and females are driven out from the oikia, the former by an adult male, and the latter by an adult female. Our opinion that young males depart from their oikiae voluntarily, but young females are induced to do so not by their mothers' compulsion, but by males' temptation, is also not based upon direct observations. But both opinions coincide to the extent that without the withdrawal of young females, gibbon's society will not be maintained well.

Even if a solitary female as reported by Carpenter may happen to be seen, it is as yet premature to conclude that a young female leaves her oikia by the same motive as in the case of a young male. A female's withdrawal will mean little, unless she leaves the oikia following a male to form a new oikia with him somewhere.

As compared with a gibbon, a male Japanese monkey after deserting his oikia must have the alternative of joining another oikia or of leading a solitary life. It never occurs that a male and a female form a new oikia. Contrary to this, a male gibbon may lure a female to form a new oikia, but he does not try to join another oikia to get his spouse. Though it is quite probable, it has not actually observed.

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Next we want to talk about gorillas. As far as the data of gibbons secured by Carpenter are concerned, they do not suffice

to explain what most concerns us here, much less the data of gorillas. We have been in Africa three times for studying gorillas, but there remain many unknown facts about them.

So far as we have observed, the smallest oikia of gorillas consists of four members; one male, two females, and their infant, and the largest oikia, of eighteen gorillas. According to Kawai,[29] the latter consists of two adult males, four adult females, ten immature gorillas including infants and babies, and other two unknown ones. One of the two females in the former oikia is comparatively young, which may be a daughter born in it. All of the males are silver-backs, though one male in the latter oikia is young which seems to be a son born in the oikia. Gorillas called 'silver backs' are males of mountain gorillas with gray white or silver white hair on a back and the sides. This is the secondary sexual character of gorillas to show that they have matured physically and sexually, so that immature males and females have not such silver hair.

Now we want to know whether male gorillas try to leave their oikia like those of Japanese monkeys or gibbons. It has already been reported that there are solitary males in the gorilla's society. This enables us to infer the withdrawal of males from the oikia with much certainty. Kawai had a rare chance to observe withdrawal from the oikia of a young silver-back

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29) Imanishi and Kawai: p. 29, 1960. See, Kawai, M. and Mizuhara, H: The Ecological Study on the Wild Mountain Gorilla (Gorilla gorilla beringei) - Report of Second JMC Gorilla Expedition 1959. Primates, II, 1. 1959

among the eighteen gorillas mentioned above.(30) As to withdrawal of females from the oikia, we have no reliable data except one report of a solitary female.(31) It seems that females do not try to leave the oikia of their own free will like males do. They are quite identical with females of Japanese monkeys in this point. Accordingly we think there is little possibility of incest between mothers and their young sons which are destined to withdraw from the oikia.

What will become of withdrawn solitary young males and of young females staying in the oikia? Judging from the fact that there exists a small oikia like the above-mentioned one consisting of four gorillas in gorilla's society, we can assume that a solitary male may lure a female from some other oikia and form a new independent oikia as well as a male gibbon does. In fact, it has been reported that some oikiae of one male and one female with no infant were observed.(32) This fact gives strong support to our assumption. It may happen at times that after leaving his oikia a male attempts to take out his elder or younger sister from the same oikia. We think it probable, though rare, that he withdraws from his oikia along with her. When he has sexual

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30) Once a solitary male with gray hair on the waist, though not a complete silver-back, was found dead. That shows the possibility of withdrawal of younger males from the oikia. (Galloway and others: p. 207, 1959) That body bore marks of violence.
31) Observations by R. L. Garner, quoted by Yerkes (Yerkes:p. 431, 1929).
32) Quoted by Akeley from J.M.Derscheid's observations. (Akeley: p. 107, 1961)

relations with her, it must be regarded as incest. In this case, his withdrawal has nothing to do with 'mating out.' But it is a kind of withdrawal from the oikia as we have seen in the division of the oikia of Japanese monkeys at Takasakiyama. We think it possible to observe such a case in gibbon's society as well.

Now we must set forth our views on the oikia of eighteen gorillas. Supposing a young silver-back, a deserter from the oikia, is a son born in it, we shall notice that this oikia is polygynous because in this big oikia only one adult silver-back[32] lives with four adult females, three of them having babies. It has been already pointed out that a gorilla is polygynous because more females are usually observed than males in an oikia. Unlike in human society, of course, gorillas do not have such a social institution as monogyny or polygyny. But statistics show that cohabitation of a male gorilla with several females is more often to be found than that of one male with one female, as seen in the case of gibbons. It may be that a male gibbon can be content with one female, because he matches with her in physical constitution. On the contrary, a male gorilla supposedly feels dissatisfied with one female, because of being bigger than her.

Then, from what place does a male gorilla bring his spouses? We have already explained that a young male gibbon after leaving

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32) Two unknown gorillas are left here out of consideration.

his oikia lures a female from some other oikia. Does a male gorilla also continue to increase his females in like manner? Should we think that sexual relations with a father gorilla causes his daughters to stay in the oikia? From the fact that such incestuous relations can occur in the society of Japanese monkeys where females make no attempt to desert their oikia, Kawai infers that there is much possibility of incest between father and daughter in the oikia of gorillas.(34)

We must notice that gorillas are apes which have evolved further than gibbons. An oikia of gibbons or gorillas, as we have already stated, is an independent social unit crystallized from such a big oikia as that of Japanese monkeys, which is based on the lasting consort relationship. And this relationship keeps its balance between a male and a female in the case of gibbons, and a male and several females in gorillas. Therefore, an oikia of gorillas must not have so many leaders and subleaders as that of Japanese monkeys, but only one adult silver-back of the leader class. When some day he dies, leaving his females and children, some of the females will have grown as old as he, and some will be still young.

Then, will they all break up? We do not think so. If there happens to be a young male in the oikia which will have reached maturity enough to be a leader, will he stay in it to get control over it in place of his dead father?

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34) Imanishi and Kawai: p. 29, 1960

We do not think so. In any case, the young male will withdraw from his oikia, and then another silver-back will come to the oikia from somewhere to monopolize the females. We think this case will be most likely to take place, because in the society of gorillas where the balance of consort relationship is maintained between one male and several females, there seem to be many solitary males which always wait for such an opportunity. Such a case as mentioned above is rarely to be observed in the society of Japanese monkeys. Notwithstanding, Kawamura reported on his observation that as an exceptional case, two adult males came into the E oikia at Minoo after the death of its male leader.(35)

We may conclude that there are two possible ways for a male gorilla, deserter from an oikia to get his females in order to balance his consort relationship: the first way is that after luring a female from another oikia to form a new oikia he mates also with his daughters born from the lured females, and the second way is that, when an old silver-back dies, he comes into the oikia and monopolizes the remaining females in place of him. It may be a easier and wiser way to succeed to the ready-made oikia after an old silver-back dies.

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There remains another problem to be settled about gorillas. It has already been reported that an oikia of gorillas consists

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35) Kawamura: p. 156, 1959

at times of twenty, thirty, or forty members, not to say eighteen, which contain, of course, three or four silver-backs. What should we think about this?

It has been explained like this: such a big oikia is an association of several small oikiae, whose silver-backs fundamentally belong to the respective oikia. In other words, if there are three silver-backs in a big oikia, it consists of three small oikiae, and if one of the three silver-backs is a young male before withdrawing from the oikia, it is composed of at least two oikiae.(36) It is a matter of dispute whether this explanation is right or not, because it has not been proved yet. It presupposes, however, what we consider very important that has not been observed in the society of Japanese monkeys, or of gibbons.

What is the presupposition? Not only Japanese monkeys and other species of monkeys but also gibbons whose social life has been investigated have all their own territory within which their oikia lives. They never try to invade the territory of other oikia, or permit themselves to be invaded. Usually there always exist not friendly but antagonistic relations between any two adjacent oikiae. For example, before the division of the oikia at Takasakiyama into two oikiae, all Japanese monkeys belonging to the oikia used to act together as one group and come to the feeding place all together, but now a newly-separated smaller oikia appears on the feeding place when the original bigger oikia is not seen around there. When the former happens

to see the latter coming there, it at once runs away, raising a cloud of dust. This sort of incident is inevitable so long as the two oikiae hold the feeding place in common. If they had split in a wild state, they would naturally have their own territories separately.

On the contrary, if several oikiae are able to unite into one large oikia in the society of gorillas, it must be said that there is no definite border-line between the territories of respective oikiae, nor any antagonistic relationship between them, as usually seen in the society of other species of non-human primates. If such a big oikia really consists of several oikiae, it may be divided into small oikiae again. Some of the semi-wild horses at Toimisaki,* are observed to act together at one time and separately at another time, because their ranges of activity partly overlap each other. We have used for this case the description that they have the 'neighborhood relationship.'(37) Several oikiae of gorillas we have mentioned above may be thought to have the neighborhood relationship as well, if actually association and separation among them take place at times.

Recent observations on mountain gorillas by Donisthorpe(38)

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36) If there are two silver-backs in an oikia, we may think that they are a male leader and his son old enough to leave the oikia as Kawai has already reported on the oikia of eighteen gorillas.

37) Imanishi: pp. 5-6, 1949
38) Donisthorpe: 1958

*....."Misaki" means "promontory" in Japanese.

and Kawai[39] have revealed that a certain terrain of their habitat is held in common by several oikiae of gorillas, so that they act together sometimes. So long as each oikia is separated from another, keeping its own territory, societies of both Japanese monkeys and gibbons have nothing to do with 'community,' the third characteristic of the human family as mentioned in § 1, though they have a little connection with incest taboo and exogamy. On the contrary, we can safely say that gorillas are concerned with community on the basis of the neighborhood relationship. In other words, the local neighborhood relationship found among the oikiae of gorillas must be regarded as the forerunner of community which conditions the human family in human society.

From the fact that more than one oikia of gorillas acts freely in an area with no independent territories and no antagonistic relations among them, and that sometimes two of them unite and form one oikia and sometimes split up again, it cannot be concluded that these oikiae are already well organized as a whole. We think, however, such a fact as the existence of neighborhood relationship is very important, because it implies a decisive diversion on the trend of social evolution of primates. We already mentioned that the oikia of gibbons or gorillas is based on the lasting consort which

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39) Kawai: Imanishi and Kawai, loc. cit. 1960

crystallized from such a big oikia as that of Japanese monkeys. Such an oikia, however, reveals in itself a limit of social evolution in so far as it is independent and antagonistic to other oikiae. The society of gibbons stays at this point. If further social development is required, it must turn the course of evolution to the opposite way, maintaining the attained level of development, that is, the integration of independent oikiae. The society of gorillas is supposed to have taken the first step toward this way breaking the deadlock of the society of gibbons by the acquisition of neighborhood relationship. Needless to say, it is human society that has developed remarkably along this way.

9

We have stated that there is the neighborhood relationship between oikiae in the society of gorillas, but nothing has been known to us about its actual organization. The following statement is rather tentative.

An oikia of gorillas sometimes consists of many members such as thirty or forty, among whom three or four silver-backs are included. Such a large oikia has been regarded as an association of more than two oikiae, as we have already stated. The possibility of such an association cannot be denied. But it may be also probable that one oikia becomes larger to the extent that it includes more than two silver-backs in it.(40)

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40) Imanishi: pp. 106-110, 1961

On condition that the neighborhood relationship has been established between several groups, we may assume first of all that individual members of each of these oikiae will be inevitably able to be acquainted with one another through the repeated contact. Then, we want to think of the behavior of a young gorilla which may withdraw from his oikia. He familiarizes himself with members of other oikiae within some terrain, so that he will surely try to find his female in a familiar oikia in the neighborhood rather than to lure a female from an unfamiliar oikia in a strange terrain far away from his neighborhood. In this case, he may know previously what young females there are in every oikia.

In so far as the neighbornood relationship has been established, if he pays a visit to other oikia, he will take no rist of being regarded with hostility or repelled from it, unlike a solitary Japanese monkey when he draws to the peripheral part of other oikia. Under these conditions, it will be easier for him to run away with a female he has lured out. As we have already mentioned, usually a male gorilla is anxious to get several females. If he happens to visit an oikia where an older silver-back is in need of a young reliable male to cooperate with him in keeping the oikia, because his sons tend to withdraw from the oikia, the young male gorilla may be induced to join this oikia without running away with a female, and moreover, be given more than one female, if he needs more. To this extent, they could possibly communicate with each other without the use of language.

If the formation of such an oikia with two silver-backs in it is possible, their coexistence should be based on a kind of compromise between an old male which hold many females in his oikia and a young solitary male. In order to maintain this coexistence relationship, it is absolutely necessary for each of them not to infringe on another's right to a share of females. The cohabitation of two silver-backs in one oikia means the coexistence of two consort relationships in it. An association of two oikiae, if possible, comes to the same thing in this point.

We have suggested that a male gorilla may join another oikia to have a consort relationship with a female in it. This means that he becomes a member of her oikia not after the death of an old silver-back, but while he is alive. When a young silver-back, now a member of his spouse's oikia, has grown old enough to need another young male, he must again offer him some females. In this case, it will be the easiest way for him to give the young male some females with whom he has not mated yet. They will be surely his daughters. So long as they are reserved for the young male in advance, it will not be necessary for the male to commit incest with his daughters. In such a situation, incest between a father and his daughters will cease, but we must notice at the same time that there must be no incestuous relations between a mother-in-law and a young male.(Note 2)

The society of gorillas may not have reached this stage yet. It is conceivable, however, that in so far as the existence

of neighborhood relationship among oikiae is conceded, the problem of incest or of exogamy, the germs of which have been recognized, may receive some impetus, some change in its interpretation, some progress in its solution. Hence we have suggested that the formation of a large oikia may be caused by the adoption of a young male. Of course, we know that there are many small oikiae in the society of gorillas,(41) so that we can assume that the neighborhood relationship and the adoption of a young silver-back have not developed to the full extent. If it is the case, what we have supposed may be regarded as the hypothetical society which has evolved further than that of gorillas.

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We do not think that there is immediate continuity between the society of gorillas and that of human beings, or that an oikia of gorillas is in a state just before human family was formed on earth, namely, the subhuman primate family mentioned in § 4. There still remains an unknown domain between gorillas and men, which is hard to approach from primatology or cultural anthropology.

On the above-mentioned argument, however, we may describe at least the social life of subhuman primate family as follows once some subhuman primate families were leading a nomadic life, seeking for their food within a limited area. It was still a

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41) See Foot-note 43.

forested area that they were living in, and what they took as daily food was almost vegetables. Though their nomadic life was maintained in a family unit, all families living in the limited area were connected with one another through the neighborhood relationship. Being well acquainted with one another, they sometimes acted together. When a boy grew up, he married into his intended wife's family. Although exogamy had not been established as an institution, it was, nevertheless, a kind of exogamy, which caused the rate of incest between mother and son, or between brothers and sisters to lower. Moreover, the restriction of incest between father and daughter followed from the universality of the adoption of a young man, and consequently more than two married couples in different generations came to live together in family. Polygyny like gorilla's cannot necessarily be supposed to be a prototype of this case, but when a man had more than one wife in a family, usually his wives were sisters.

What we have seen above makes it clear that even gorillas can nearly satisfy three of the four criteria enumerated in § 1. But so far as the last fourth, division of labor between a husband and a wife is concerned, no trace of it can be observed in the oikia of gorillas. If it means that a mother breeds and raises her infant, any kind of monkey has a habit of doing so. It is quite obvious that such a function of biological family was unconditionally brought into the subhuman primate family. A husband and a wife of subhuman primate family were much the same as a couple of monkeys in that they did not

divide their labor economically except in biological division of labor, or cooperate with each other to find food. On a standpoint to insist that the oikia of gorillas or of gibbons should not be regarded as a family it may seem inconsistent to place such a subhuman family on a human level.(Note 3)

In what stage of evolution did the division of labor take place? We have not any knowledge about it, but it is generally assumed that the division of labor did not appeared until men were engaged in hunting while women in gathering vegetables. On the other hand, it needs a kind of integration of labor. If men and women had exclusively possessed either their games or wild vegetables by themselves, it is not the division of labor. On the contrary, the division of labor between a husband and wife becomes possible when they come to share what they have gained with each other, at the same time an economic connection between them arising to integrate their labors. This integration of labors is the last milestone marking a change from a subhuma family to a human family.

Where, and how did this change occur? So far as the subhuman family was living in the forest, the change could not possibly happen. Did it take place after their migration from the forest to the savanna? They eventually migrated out to the savanna, but not at one try. At first those who lived in the forest contiguous to the savanna became curious to know what the savanna was, and wondered at various kinds of animals there much more than in the forest. When those animals were

known to be edible, they tried to catch them. Unlike the forest where they had lived, the savanna was too open a land for them to hide themselves, and moreover there were so fierce animals as lions. There they could not be off their guard at all times. At first men alone went there without taking their women or children, because they tended to become a burden upon men. In those days subhuman families may have scattered, but when men went to the savanna, they may have grouped themselves to act together. It is essentially the same phenomenon that is observed on semi-wild horses at Toimisaki which have an inclination to form an assemblage in the open, though they can live separately in the forest. This is another case in which the law of concentration holds good.(42) While men were hunting in the savanna, women were gathering wild edible plants in the forest. But they had to gather with what they had gained. Of course, they had already evolved to such an extent that they could stand erect and use their hands freely, so that they did not feel inconvenience in carrying their gains. Next we must consider another question to what place they did carry them. It seems improbable that they changed their sleeping places every night like gorillas or chimpanzees. Usually they must have settled in a place for certain days. Laying aside the question whether they could live in this complex mode of life without verbal communication under these conditions, that is, we could say that so far as

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42) Imanishi: pp. 31-32, 1950

the division of labor is concerned, subhuman families had attained to the level of human families under these conditions, that is, before their migration into the savanna from the forest.

Settling in the forest, they tried to know the savanna better, till their familiarity with it made them decide to migrate into it with their family-members. We assume that they had become considerably skilful at hunting and producing tools necessary for it by that time. We must add here that another decisive change may have occurred in the structure of human society.

As we have mentioned above, men were inclined to band together while hunting in the savanna, but women did not necessarily need to work together while gathering wild vegetables in the forest. Therefore, families may have been camping dispersedly here and there, and may have migrated into the savanna dispersedly as well. It seems, however, the dispersed families gathered again in the savanna in accordance with the law of concentration.(43) Though they had been apt to be concentrated even in the subhuman stage, finally they formed a band of families to cooperate with one another for self-support and

43) Like the coexistence of large and small oikiae in the society of gorillas, the existence of large families among subhuman families or earliest human families must have promoted the concentration of families much faster than the existence of all small families which consist of one male and one female like the oikia of gibbons. The reason is that small families tend to be concentrated around a large family. (Imanishi: 1950, the law of concentration)

and self-defence. Some existent hunting and food-gathering people do not form a definite band, their families sometimes living dispersedly. They do not represent critical situation mentioned here, but an example of secondary adaptation to the environment.(44)

With the maintenance of mutual close relations between families in a band, men must have become conscious that they were all brothers, and then created a myth that they were all descended from common ancestors. Marriage in the forest already tended to develop into exogamy between families in keeping friendly neighborhood relation-ships between them. As Steward has already suggested,(45) with the realization of important roles of men in a hunting band young men should have been prevented from mating out which had originated in withdrawal of a young monkey or ape male from his oikia. The alternative of it is to give out their young women in marriage. Consequently it may have caused a change to the patrilineal descent from the matrilineal one which had lasted for ages. As it is a change that took place after the complete establishment of human families, we will only bring forward this problem here.

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44) Coon: pp. 46-116, 1953 & Steward: pp. 101-121, 1955
Steward doubts whether the life on a family level was a prototype (Ibid. p.120). We must notice that there are not such fierce animals as lions in a habitat where hunting and food-gathering people live in a family unit without forming a group of families (Imanishi).

45) Steward: p. 156, 1955

Note 1. -- Freudian influence is remarkable: the hypothesis that non-existence of incest taboo inevitably causes incest was offered to oppose to a thesis given by Westermarck that cohabitation from infancy prevents one from having sexual desire for his close associate, and Freud strived to prove this hypothesis by the facts based on psychoanalysis (Freud: p.122ff, 1950). We do not mean to deny this fact, but we much doubt whether it is possible to judge of the whole human being by limited data obtained from persons in need of psychoanalysis. And we also feel it dubious whether it is possible to explain the personality of human beings that lived some hundred thousand years ago on the basis of the personality of these people treated by Freud in modern civilized society. However, White says as follows:

> "We find, therefore, even in subhuman primate families, a strong inclination toward inbreeding; one strives to obtain sexual satisfaction from a close associate. This tendency is carried over into human society." (White: p.424, 1948)

He seems to think that human beings should have an inherent desire for incest, because even monkeys have it, but he does not offer any evidence that monkeys have such an inclination toward inbreeding. As a matter of fact, there cannot be found such an evidence. Not merely White, but Seligman is arguing it from entirely the same false premise, though he is opposed to White concerning to the origin of incest (Seligman:p. 312,

1950). It is to be regretted that faulty Freudian hypothesis has been accepted without due consideration widely in cultural anthropology -- for example, by Murdock. (Murdock: p. 293, 1949)

What comes into the question next is relations between father and son in subhuman primate families, which arrested a inclination toward incest. Freud himself declared that he got a hint of it from Darwin (p. 901,1874). Incest impeded under these circumstances is sexual relations between mother and son, and between brothers and sisters, but not between father and daughter. Sons expelled from their families are compelled to find their spouses in another family. White says as follows:

> "Thus we may assume that before the anthropoid family had reached the human level, a form of exogamy had already been established by the brute force of the dominant male." (White: p. 91, 1959)

He recognized the germ of exogamy in the subhuman primate family. It is one of the hypotheses taken over from Darwin to Freud that jealousy and competition between a father and a mature son concerning a female result in the expulsion of the latter from the family. Together with the faulty hypothesis of a natural inclination toward incest, this hypothesis, though not proved yet, has shown itself everywhere in anthropology. We think that the time has come when we should reconsider them thoroughly.

We must add here that, while White has admitted a form of exogamy in the subhuman primate family, he does not refer to

mutual relations between subhuman families, or to a community where the relations can exist. We have no objection when he says on the development of subhuman primate family into the human family, or the institutionalizing of incest taboo and exogamy under the necessity of cooperation between families. But without the community, both incest taboo and exogamy cannot be institutionalized. Does he mean to say that under the necessity of cooperation the community was formed on the human level on a sudden? I would ask the answer of White, because I found it difficult to explain the establishment of community to our satisfaction when I wrote Prehuman Societies (Imanishi: 160 ff. 1951) But now we can say that, like incest taboo and exogamy, the community must have had its forerunner in accordance with the stage of subhuman primate family.

Note 2-- Most of the theories ever propounded have treated only of incest and exogamy. Goody, however, points out as follows: when sexual relations between men and women of a clan are forbidden, is a man of the clan, for example, allowed to have sexual intercourse with the wife of another man of the same clan because she does not belong to the clan as his wife does not? But the society forbids his doing so in order to maintain the family as an institution. If not only incest but adultery is not discussed at the same time, it will leave something to be explained from a viewpoint of the social organization. (Goody: pp. 303-4, 1956)

We think his criticism to be reasonable, but the society he has taken up as the subject of the study is not subhuman primate society as we have mentioned above, but the existent elaborate, though uncivilized, society. Almost all scholars, moreover, though he is one of them, have discussed incest and exogamy by the assumption that a family means only a nuclear family. Consequently they have neglected adultery committed within a family.

It is of secondary importance from the view-point of social evolution whether a consort relationship is monogamous or polygamous. It is rather of first importance that in some stage of social evolution before the advent of verbal communication the confirmation of consort relationships came to be recognized socially. It has been realized since when all oikiae abandoning territoriality came into contact with one another through the neighborhood relationship. What comes into the question from our hypothesis is that the coexistence of different consort relationships in an oikia is established, that is to say, the coexistence of two silver-backs in an oikia caused by the adoption of a young silver-back. In other words, incest between father and daughter is forbidden after a young male has been allowed to have a consort relationship with her, for, if it is committed again after that, it is not only incest, but adultery, which means a disturbance of the order in an oikia.

Sexual relations between daughter and brother may not be permitted as well after her mating with a young silver-back. On the other hand, the silver-back must not concern himself

with his mother-in-law. After consort relationships belonging to two different generations have been established in an oikia, the withdrawal of other young males born in it will be approved socially.

What we have suggested here is that incest between mother and son is rather difficult for various reasons in the society of apes; that, though 'mating out' follows from the withdrawal of a young male, it is not until after the establishment of the neighborhood relationship that a young male silver-back enters into the approved consort relationship with a young female in another oikia; and that at this stage the social relations in the oikia comes to be put on a firm order, when incest is necessarily prohibited as a kind of adultery in the oikia. And once this order is established, it becomes possible that when human families join together to form a community, observance of this principle may enable those families to co-exist and multiply the number of co-existing families indefinitely. The reason why the indefinite multiplication of families is possible is connected with the formation of a big oikia with more than one silver-back, which is comparable to a large family in human society. In our opinion, the fact that no attention has been paid to this point is due to the preoccupation of scholars in Europe and America with the idea of a "nuclear family."

Note 3 -- A primatological approach would lead us to the view that a subhuman primate family is nothing but a kind of evolved

oikia. Then the structure and function of an oikia varies according to the evolutionary level of the society in which it is included. The oikia of Japanese monkeys is not the same as that of gorillas. So long as the word 'oikia' is used, the difference between two oikiae belonging to the different evolutionary level is not clarified. In taking up the society of gorillas, we think it also possible to call an oikia of females and infants led by a male silver-back a family of gorillas, a kind of subhuman family, but not a human family. In fact, we have often used the word 'family' for an oikia of gorillas since we came to treat gorillas as the subject of our study (Imanishi: pp. 76-78, 1958 b, pp. 12-14, 1959). This word, however, does not differentiate the family of gorillas from that of human beings, just as the word oikia expresses no difference between the oikia of Japanese monkeys and that of gorillas.

Of course, an oikia of Japanese monkeys is not called a family of Japanese monkeys. Notwithstanding the reason that an oikia of gorillas is sometimes called a family of gorillas is attributed to its intermediate characteristics between an oikia of Japanese monkeys and of a human family, which themselves represents its level of social evolution. If we want to show the intermediate characteristics of an oikia of gorillas which differ from either an oikia of Japanese monkeys or a human family, it is desirable to give this intermediate oikia a new term other than either an oikia or a family. For this purpose I propose a use of the term 'familoid.'

The oikia of chimpanzees may possibly be a familoid as well. Since the study of gibbons by Carpenter, their oikiae have tended to be regarded as a family, though we have insisted that it is an oikia, but not a family. We cannot help admitting that the society of gibbons where all oikiae have antagonistic relations with one another in separate territories is further backward in social evolution than the society of gorillas where all familoids have neighborhood relationships with one another without their own independent territories. On the other hand, we know well that gorillas have evolved further than gibbons from the viewpoint of morphology, though both of them are called apes. Is it then possible for us to put both of their social lives into the same one category of apes from the correlation between the similar life form and similar mode of life"? (Imanishi: p. 77, 1958 a) Whether an oikia of gibbons may be called a familoid or not depends on whether the definition of familoid may be applied to an oikia of gibbons.

In other words, it is possible if we can find there is any observable social phenomena to make a distinction between apes including gibbons and various kinds of monkeys on lower levels. Then it will give a solution to this problem whether a male can exclusively possess females in a consort relationship. The oikia of Japanese monkeys, how firmly organized, is still unstable and unfixed in consort relationships within it. If it is true that the formation of subgroups of an oikia of redtail monkeys reported by Haddow results from the exclusive possession of females in their consort relationships, it is assumed that a

final independent oikia attained through such a stage may be small like that of gibbons with a firm consort relationship. But the subgroup of redtail monkeys as mentioned has not been made clear in detail. Other species of monkeys on a lower evolutionary level than gibbons have not been observed hitherto to have a firm, stable consort relationship. We think it most essential for the definition of 'familoid' whether there is a fixed consort relationship in an oikia.

As the establishment of a fixed consort relationship means the exclusive possession of females, it is not an exclusive possession that two males possess three females in common in an oikia. If it does not consist of one male and one female as seen among gibbons, a balanced consort relationship between one male and several females of gorillas is also a kind of exclusive possession. The basic point is that the exclusive possession of females by one male should not be changed into common ownership of them between two males when a solitary male joins the oikia. Some oikia of howler monkeys, or of spider monkeys native in South America includes in it only one adult male, which is seemingly similar to an familoid. But it is nothing but a phase of its oikia based on common ownership.

It becomes clear of itself in the society of gorillas how important is the establishment of exclusive possession in a consort relationship, for the possibility of the association of two familoids in the society of gorillas and that of a young male's joining his spouse's familoid are based on the assumption

of the male's exclusive possession of females in a consort relationship. In the society of gorillas the exclusive possession of females is recognized and approved socially. On the other hand, the familoid of gibbons seems to be what a traditional mode of life in an oikia of monkeys has finally reached in that they have attained to the exclusive possession of females and to its social recognition on the basis of the isolation of its familoid.

It is still not clear whether gorillas have paved a way to a present neighborhood relationship after an isolation of their familoid through the same evolutionary processes as those of gibbons. The society of gibbons is an example of a limit of social evolution seen in primates. At the same time it is a turning point, or a starting point toward further evolution. Along the course of evolution which begins at gibbons, gorillas enter into another new phase. On this ground it would be reasonable to think that one extreme of famioid may be represented by the oikia of gibbons which has attained the establishment of a fixed consort relationship, namely, the beginning of new trend of evolution extending to man.

We have made a distinction between the family in human society and the familoid in the society of apes, but there still remains another problem. Granting that the oikia of apes can be given the term 'familoid' from the view-point of comparative sociology, the oikia in the society of monkeys in general will require a new terminology. I do not yet have an appropriate word for the oikia of monkeys on a lower evolutionary

level than gibbons.

References

Akeley, M. L. Carl Akeley's Africa. (New York, 1929)

Carpenter, C.R. "A Field Study in Siam of the Behavior and Social Relations of the Gibbon (Hylobates Lar)," Comparative Psychology Monographs 16 (No. 5, 1940) pp. 1-212

Idem. "Tentative Generalizations on the Grouping Behavior of Non-human Primates," Human Biology 26, (No. 3) 1954) pp. 269-276

Coon, C. S. A Reader in General Anthropology (New York, 1953)

Count, E. E. "The Biological Basis of Human Sociality," American Anthropologist 60 (1958) pp. 1049-1086.

Darwin, C. The Descent of Man, Second Edition (London, 1874)

Donisthorpe, J. H. "A Pilot Study of the Mountain Gorilla (Gorilla gorilla beringei) in South West Uganda, February to September," South African Journal of Science 54 (No. 8, 1958) pp. 195-217

Fortune, R. "Incest" Encyclopedia of Social Sciences 7 (1932) pp. 620-622

Freud, S. Totem and Taboo, trans. James Strachey (London, 1950)

Galloway, A., Allbrook, D. and Wilson, A.M.M. "The Study of Gorilla gorilla beringei with a Post-mortem Report," South African Journal of Science 55 (No. 3, 1959) pp. 205-209

Goody, J. "A Comparative Approach to Incest and Adultery," British Journal of Sociology 7 (1956) pp. 286-305

Haddow, A. J. "Field and Laboratory Studies on an African Monkey," Cercopithecus ascanius schmidti Matschie, Proceedings of the Zoological Society of London 122 (1952) pp. 297-394

Imanishi, K. "Social Life of Semi-wild Horses in Toimisaki," Physiology and Ecology, 3 (1), (1949)

Idem. "Social Life of Semi-wild Horses in Toimisaki," Physiology and Ecology, 4 (1-2), (1950)

Idem. Prehuman Societies. (Tokyo: Iwanami Shoten, 1951)

Idem. Principles of Subhuman Societies (2nd ed.; Tokyo: Rikusui-sha, 1958)

Imanishi, K. "Gorillas: A Preliminary Survey in 1958," Primates 1, (2), (1958)

Idem."The Society and the individual: the Social Development and the Individual Evolution", Societies and Individuals of Animals. ed. K. Imanishi (Tokyo: Iwanami Shoten, 1959) pp. 1-15.

Idem. "Social Organization of Subhuman Primates in Their Natural Habitat," Current Anthropology 1 (1960) pp. 393-407.

Idem. Gorilla (Tokyo: Bungei-Shunju Shinsha, 1961)

Imanishi, K. and M. Kawai. "JMC Gorilla Expedition," Kagaku-Yomiuri 12 (No. 2, 1960) pp. 17-37

Itani, J. "The Life of Anthropoid Apes and the Society," Gendai Bunka-jinruigaku 1, Ningen no Seikatu (Tokyo: Nakayama Shoten, 1959) pp. 27-71

Ito, Y. Comparative Ecology. (Tokyo: Iwanami Shoten, 1959)

Kawamura, S. "Deer at Nara Park," Nihon Dobutsu-ki 4 ed. K. Imanishi (Tokyo: Kobun-sha, 1957)

Idem."The Japanese Monkeys at Minoo," Nature Study 5 (No. 12, 1959) pp. 154-156.

Lévi-Strauss, C, "The Family," Man, Culture, and Society, ed. Harry L, Shapiro (New York: 1956) pp. 261-285

Levy, M. J. "Some Questions about Person's Treatment of the Incest Problem," British Journal of Sociology 6 (1955) pp. 277-285.

Malinowski, B. Sex and Repression in Savage Society (London, 1927)

Idem. The Sexual Life of Savages in North-western Melanesia (London, 1929)

Murdock, G. P. Social Structure (New York, 1949).

Parsons, Talcott. "The Incest Taboo in Relation to Social Structure and the Socialization of the Child," British Journal of Sociology 5 (1954) pp. 102-115.

Seligman, B. Z. "The Problem of Incest and Exogamy: a Restatement," American Anthropologist 52 (1950) pp. 305-316

Slater, M. K. "Ecological Factors in the Origin of Incest," American Anthropologist 61 (1959) pp. 1042-1059.

Sugiyama, Y. "On the Division of a Natural Troop of Japanese Monkeys at Takasakiyama," Primates, 2 (2) (1960)

Steward, J. H. Theory of Culture Change (University of Illinois Press, 1955)

Tokuda, K. "Monkeys in a Zoo" Nihon Dobutsu-ki 4 ed. K. Imanishi (Tokyo: Kobunsha, 1957) pp. 167-268.

White, L. A. "The Definition and Prohibition of Incest," American Anthropologist 50 (1948) pp. 416-435.

Idem. The Evolution of Culture (New York, 1959).